

# Patient Navigation Barriers and Outcomes Tool (PN-BOT™)

## Frequently Asked Questions

### How much does the PN-BOT™ cost? Is there a regular fee?

PN-BOT™ is provided to all patient navigation programs for free. There is no subscription fee or any other form of charge. PN-BOT™ is copyrighted, so if you intend to use any part of PN-BOT™ for commercial or profit purposes, you must first contact the GW Technology Commercialization Office ([tco@gwu.edu](mailto:tco@gwu.edu)) and Mandi Pratt-Chapman ([mandi@gwu.edu](mailto:mandi@gwu.edu)) to obtain permission.

### Is the PN-BOT™ available for Macs, mobile devices, and other platforms?

Currently (as of September 2016), the PN-BOT™ is only available in Microsoft Excel format for use on a PC that runs Windows. PN-BOT™ functionality has been tested and confirmed for Excel versions 2010 through 2016. PN-BOT™ may work for Excel 2007 (untested) but will likely not be compatible with versions older than this. PN-BOT™ will not work properly for Mac versions of Excel nor for online platforms (for example, Excel online or Google sheets) because the macros required for functionality are not supported on these platforms. There are no plans at present to develop additional versions of PN-BOT™, but the possibility is open with additional resources and support.

### Can PN-BOT™ integrate with my organization's electronic health record system?

Not at present. PN-BOT™ is a Microsoft Excel file, with the same capabilities and limitations as other Excel documents that you may be familiar with. If your hospital or organization's electronic health record system can interface with Microsoft Excel, it might be possible with a little work to align the raw data in PN-BOT™'s List sheets to import or export data. However, we have not tested any form of PN-BOT™ integration. If you have success in this area, please let us know ([navigation@gwu.edu](mailto:navigation@gwu.edu)).

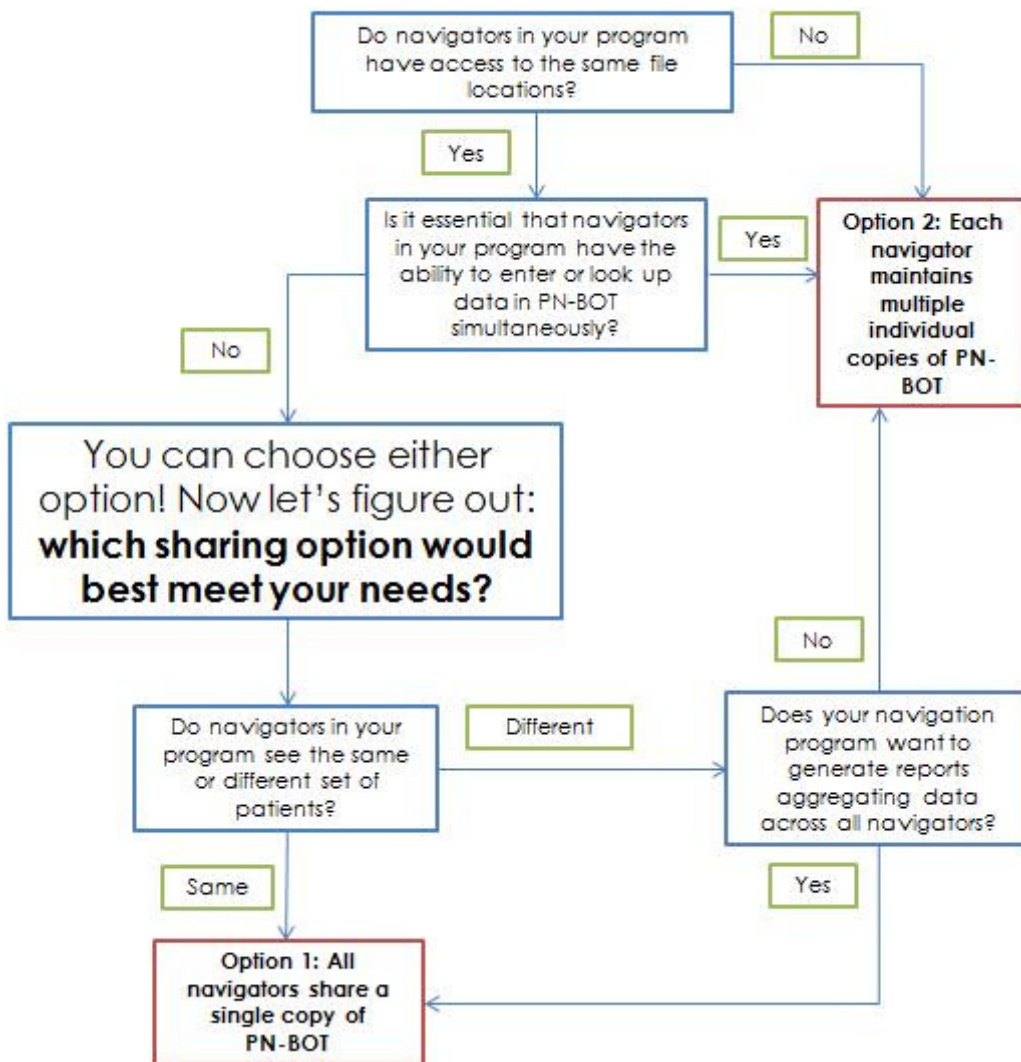
### How can I share PN-BOT™ with multiple navigators?

Currently (as of September 2016) PN-BOT™ does not support simultaneous data entry or report running. PN-BOT™ is essentially a macro-enabled Microsoft Excel document, and has all of the same sharing limitations inherent in the platform. It cannot be edited by multiple people at the same time, and it will take a few extra steps to share among navigators. In order to use PN-BOT™ to aggregate data across navigators, there are a couple of workaround options. The appropriateness of each option will depend on your organization's infrastructure and your program's needs. Consider the following factors:

- Do navigators in your program see the same or different set of patients?
- Do navigators in your program have access to the same file locations? (e.g. shared desktop computer or shared server folder)
- Do navigators in your program need to enter and look up data simultaneously?
- Does your navigation program want to generate reports aggregating data across all navigators?

Which sharing options are possible in my setting?

## Which sharing option is possible in your setting?



### Option 1: Single copy of PN-BOT™

- **Requirements:** Multiple navigators may document in the same PN-BOT™ document if they all have access to the same file and do not need to document at the same time.
- **Why you would choose this option:** This is your best option if the above requirements are met and 1) navigators share patients and want to see what their colleagues have done with patients and/or 2) your navigation program wants to generate aggregate reports across all navigators.
- **What this option looks like:** Save the PN-BOT™ in a network or shared drive folder, shared desktop computer or other location accessible to all navigators. If one navigator has the PN-BOT™ file open, other users will only be able to view the file to avoid the creation of conflicting copies. Only one person will be able to save changes to PN-BOT™

at a time. Since all data entry is happening in a single file, no additional work is necessary to get aggregate reports across navigators.

## Option 2: Multiple copies of PN-BOT™

- **Requirements:** No extra requirements.
- **Why you would choose this option:** This is your best option if 1) you do not have the infrastructure to share the PN-BOT™ file, 2) navigators need to enter data into PN-BOT™ at the same time, 3) navigators navigate different sets of patients and do not need to see what everyone else has done or 4) aggregate reports pooling data across navigators are not desired.
- **What this option looks like:** Have each navigator maintain individual copies of PN-BOT™. All navigators will be able to enter data at any time, but will not be able to see other navigator's updates without opening their colleague's separate PN-BOT™ files. The reports included in each copy of PN-BOT™ will only reflect the data entered into that specific PN-BOT™ file and will therefore be navigator specific.

## How do I get aggregate program-wide reports across navigators if they are each using a separate copy of PN-BOT™ (sharing option 2)?

If aggregate reports are desired, make sure that the same set of variables are selected in the Set Up sheet of all copies of PN-BOT™ in use so that all navigators collect the same set of desired data. You have two options for aggregating reports across copies of PN-BOT™:

- Run reports separately in each copy of PN-BOT™ and then manually add the numbers together from the report tables in a separate Excel or Word document outside of PN-BOT™ (assumes that there is no overlap/redundant entries across PN-BOT™ files), or
- Combine all raw data from all PN-BOT™ files in a single entry empty PN-BOT™ file reserved for aggregate reporting purposes only. If you wish to go with this option, you will need to think ahead and take precautions to avoid assignment of the same Client ID, Case ID and Encounter ID numbers to different people. To avoid this, start each copy of PN-BOT™ with a different range of ID numbers so that overlapping numbers will not get assigned across copies of PN-BOT™ (also see section on "Can I assign my own Case ID or Encounter ID numbers?").

## Can I use the patient's medical record number as the Client ID?

Yes. You may use any unique string of letters and/or numbers for a client's ID number. You may choose to use sequential numbers, the patient's medical record number or anything else that makes sense to you. It is most important to make sure each patient only has one ID number and each ID number only belongs to one patient.

Note: If you manually assign a numeric Client ID number with a value of 9999999999 or greater, future attempts to use the "Get New Client ID" button will result in an error message, disabling the auto-numbering feature.

## What do I do if I accidentally delete a patient's record?

When you select "Delete Patient Record (Permanent)," you will receive a message confirming whether you really do want to delete the record. Once you select "yes" in response to the message, the patient record will be permanently deleted and there is no way to retrieve it. Therefore, we recommend regularly backing up your data and exercising caution when deleting.

## Can I enter back-enter data for things that happened in the past?

Yes. In some Data Entry forms, date fields might default to today's date to help make data entry go faster when you are entering data on the same day. However, if you are back-entering data on a different date, you can easily change these fields to reflect the actual dates that events occurred. Just click in the date field and type or select the date that you want.

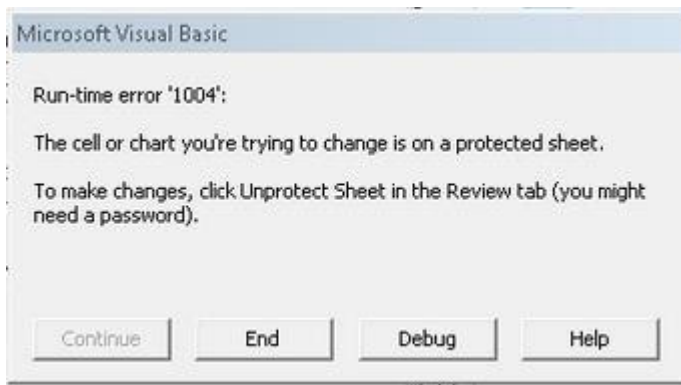
## What if my patient has a recurrence or multiple cases? How do I document that?

If the patient does not have any records documented in PN-BOT™, enroll the patient as you would any other patient. You may choose to use the "Recurrence?" data field in the Case Data Entry sheet to capture whether or not the patient's case involves a first-time primary cancer diagnosis or recurrence.

If the patient already has a previously documented case in PN-BOT™ from a previous bout with cancer, a second case can be created to document the recurrence as a separate navigated episode without overwriting information from the first case. Select the patient in question from the dropdown in the Case Data Entry sheet. Then click on the "Add New Case" button to start a new blank form to use for the patient's second case.

## I got a Microsoft Visual Basic error message. Buttons that I should be seeing have disappeared and PN-BOT™ is having issues. What do I do?

Microsoft Visual Basic errors have buttons that say things like "End," "Debug," and "Help" and look something like this (individual error message may vary):



This section is NOT referring to other error messages that PN-BOT™ may give you to try to prevent data entry mistakes.

PN-BOT™ contains a lot of programming on the back end, and Microsoft Visual Basic error messages tell you that something went wrong in the middle of running the code. In some (but not all) instances, buttons may disappear following an error message because the program got interrupted by the error before it could reach the command telling PN-BOT™ to display the appropriate buttons.

We hope you do not come across error messages, but if you do, just SAVE, CLOSE, and RESTART PN-BOT™:

- **Save the file.** Consider using "Save As" (instead of regular "Save") to save the file. Doing so will result in two files: the PN-BOT™ file as of your previous save prior to the error, and the PN-BOT™ file saved after the error occurred. Just in case your copy of PN-BOT™ that had an error message is permanently corrupted in some way, you will have the option to revert back to your pre-error version since it did not get saved over by the newer post-error version. This gives you the option to use either version - just be sure to get rid of the

other one once the decision is made so that you do not get confused about which PN-BOT™ file is the most current.

- **Close the PN-BOT™ file and re-open it.** In most cases, PN-BOT™ will work fine again once it is closed and re-opened and nothing else needs to be done.
- **If you were in the middle of entering or updating data when the error occurred, make sure that you do not have unsaved data in a Data Entry form.** Verify this by looking in the appropriate List sheet for the expected data. If it is not there and it is still in the Data Entry sheet, be sure to click on the appropriate grey “Save” buttons to transfer the data into the List sheets.

Please report the issue you encountered using the [PN-BOT™ feedback form](#) on our website so that we can try to address it in the event of future PN-BOT™ development. It would be very helpful if you could send us:

- A description of what exactly happened that triggered the error message.
- A screenshot illustrating the issue (please DO NOT send us any images containing patient identifiers or other protected health information).
- The line of code associated with the error. If you click the “Debug” button when the error message pops up, a screen will open with the line of code highlighted in yellow.

### Can I assign my own Case ID or Encounter ID numbers?

Case ID numbers uniquely identify each case and Encounter ID numbers uniquely identify each encounter. Although it is no problem to assign your own patient-level Client ID numbers, you generally cannot assign your own Case or Encounter ID numbers. PN-BOT™ generates Case ID numbers automatically in sequential order when each case is first created. PN-BOT™ generates Encounter ID numbers automatically in sequential order when each encounter is created. Attempting to edit Case or Encounter ID numbers from the respective Data Entry sheets will result in an error message because those data entry fields are protected.

There is one important caveat to this discussion. If your program plans to pool data from multiple PN-BOT™ files to generate aggregate reports, you will end up with a big data set with overlapping Case and Encounter ID numbers that refer to different cases and encounters and therefore no longer serve as unique identifiers. If you know that you want to pool data, it will be important to plan ahead and set up each navigator’s copy of PN-BOT™ to use a different set of ID numbers that will never overlap. PN-BOT™ will always simply add one to the largest ID number in each List sheet when automatically assigning ID numbers of any type. This overlapping ID number issue can be avoided with a simple tweak in the respective List sheets.

For example, imagine that a program has three navigators using three separate copies of PN-BOT™, and each will be documenting her own encounters that will be combined later for reporting purposes. If you don’t do anything, PN-BOT™ will start Encounter ID numbering at 1 in each copy of PN-BOT™ which will result in three different encounters with an ID of “1”. To avoid this, the first navigator should change the value of the “Encounter ID” in the “Encounters List” sheet for “First Example Patient” from “1” to “20000”. Now her encounters will get assigned ID numbers in the range of “20001”, “20002”, “20003” etc. The second navigator can change the value of the “Encounter ID” in the “Encounters List” sheet for “First Example Patient” in her copy of PN-BOT™ from “1” to “40000”. Now her encounters will get assigned ID numbers in the range of “40001”, “40002”, “40003” etc. The third navigator can leave her copy of PN-BOT™ alone and use the default “1”, “2”, “3” numbering. Unless the navigators conduct more than 20,000 encounters, their Encounter ID numbers will not overlap when their encounters data is combined.

## I know I entered data for \_\_\_\_\_. Why don't I see it in the report?

Data cleaning is an essential part of creating reports. If you entered data into PN-BOT™ and you are not seeing the numbers that you expect in the automatic reports, there can be a few reasons why. Go through the list below sequentially to troubleshoot.

- **Did you click the “Calculate/ Refresh” button at the top of the reports sheet that you are using?** Doing so ensures that your report reflects the most current data entered in PN-BOT™.
- **If you are trying to use an automatic report with summary statistics looking at timeliness (e.g. with average, maximum, and minimum columns), please note the values will appear blank if there is a problem with the dates entered.** For example, if a report summarizes number of days between first screening and treatment initiation, any instance where someone enters a treatment initiation date BEFORE date of first screening (which usually does not make sense) would result in blank values in the corresponding report.
- **Was the data successfully entered and saved?** To double check that the data that you recall entering has actually been saved in PN-BOT™, consult the appropriate List sheet. For example, if you entered “Primary Insurance” information into the Patient Data Entry sheet, you should look at the patient’s row in the Patient List sheet to see if the insurance information that you entered is actually there.
- **Is it part of the data table?** When you enter and save new data through the Data Entry sheets, the table of data in the respective List sheet should automatically grow to add the new data. However, if you directly entered new rows of data into the List sheet (not recommended; always add new data using the Data Entry sheets) then your data might be outside of the table. Reports only draw from the data contained inside of the tables in the List sheets. To see if all your data is part of the table, scroll down to the last row. Is the color of the row formatted to look like the rest of the table? Click anywhere in the last row. Do you see the menu option “Design” show up at the top of your Excel document? If so, all your data should be part of the table and this is fine.
- **Do your responses match with what the report is counting?** Many of the automatic reports count specific types of responses. You can tell what each report is trying to capture by looking at the column header names of the report. For example, in the Patient Reports sheet, the “Primary Insurance” report has columns for “Medicaid,” “Medicaid HMOs/Managed Care (specify in notes),” “Medicare,” “Private Insurance (specify in notes),” “Uninsured,” “Other (specify in notes)” and blank. If the navigator entered insurance data using the dropdown lists in the Patient Data Entry sheet, answers will always automatically match these headers. However, if someone manually wrote in answers in this field such as “no insurance” or “pending” or anything else not listed in the dropdown list for “Primary Insurance” using the Patient List sheet, these responses would not show up in the Primary Insurance report, resulting in a number discrepancy.
- **Does all your data have essential dates entered?** All automatic patient reports are organized by Intake Date. Therefore, if a patient entry is missing the Intake Date variable, it will not get counted in any of the automatic patient reports. For case reports, Case Start Date is the main important date of interest (although some draw from other dates, such as Case Close Date etc. depending on the report). For encounters and barrier reports, Encounter Date is the main important date of interest. Make sure that your entered data contains the essential date required for your report of interest.
- **Are all of the numbers you expected to see contained within one calendar year?** Automatic reports display one calendar year at a time. Therefore, if you expected to see 50 cases in your Case Reports sheet but 25 started in 2015 and 25 started in 2016, you will

not see them all at once. You will need to select one year at a time using the drop down at the top of the reports sheet.

- **If you have checked all the above steps you should no longer have a discrepancy.** It is possible that you do if you changed PN-BOT™ versions from 1.0 to 1.1 and attempted to transfer your data set between versions. If your formulas were not properly adjusted and carried down during the transitions, some of your data might not get counted. Revisit the version transition tutorial video to make sure that the formula dragging step was executed correctly.

### **What if I want a report of summary statistics for a time period other than a calendar year?**

To see summary statistics for your own custom date ranges, you have the option to explore PN-BOT™ List sheets. Filter the data table in the List sheet by your date criteria of interest. Then, highlight the data in the column containing your variable of interest. The bottom right corner of Excel will automatically display an average, count and sum of that variable. Always remember to clear all filters before leaving the sheet once you are done.

### **I just entered my first patient in the Patient Data Entry sheet and saved the record, but that patient is not showing up in Case Data Entry or any patient selection drop down menus. What's wrong?**

Make sure that your Excel options are set to automatically add new rows to tables. To do this in Excel 2010, go to the "File" tab, then "Options", then "Proofing," then "AutoCorrect Options", then "AutoFormat As You Type". Make sure that the option "Include new rows and columns in table" is checked.

### **Why do I see a previously entered patient's information when I want to enter information for another patient in the Encounters Data Entry sheet?**

The Encounters Data Entry sheet has a quirk that was necessary to incorporate for the technical functioning of the sheet. Normally, all form fields remain hidden until you click one of the 2 radio buttons at the top of the sheet: "Add a new Encounter" or "Update an Existing Encounter." However, if you save the PN-BOT file at any point while entering data, this will unhide all form fields in the Encounters Data Entry sheet. When this happens, you will see all Encounters Data Entry form fields with previously entered information in them. However, you will also be missing the grey "Save" button for this page, so you are not in any danger of saving a previously entered patient's information to the wrong patient.

To clear the Encounters Data Entry form and proceed with data entry, just select a patient and click either of the 2 radio buttons at the top of the sheet. Doing so will clear out any old information from the form fields and will make the grey "Save" button appear. Never attempt to enter data into the Encounters Data Entry sheet without first selecting a patient and clicking one of the 2 radio buttons.

### **Why do dates in my \_\_\_\_\_ List sheet look like a strange number instead of a date?**

You may see a strange five digit number like 35236 somewhere in a List sheet data table where you expect to see a date. If so, that means that the variable type is incorrectly set to something other than a date type. To fix this, unprotect the sheet. Then, select all data for the column in question. From the Excel menus at the top of your screen, select the "Home" ribbon tab, look in the "Number" group of functions, and click on the dropdown of variable type options to select "Short Date."

Note: If you are seeing strange numbers only for some entries at the bottom of the sheet, it may indicate that those specific entries have not been included in the data table. If this is the case, you'll also notice that those bottom entries are also missing other formatting such as background

shading. To fix this make sure that your Excel options are set to automatically add new rows to tables by following instructions in the previous section.

### **What could be the long-term implications of PN-BOT™ utilization?**

PN-BOT™ was designed with the diversity of oncology patient navigation programs in mind. Each program has its own unique set of priorities and circumstances, and the best way to utilize PN-BOT™ will depend largely on those program-specific factors.

Some keys to successful PN-BOT™ use include:

- Strong communication across all members of the patient navigation team to ensure that everyone's data needs are being met.
- Healthy balance between feasible data entry burden and robust data collection for reporting purposes
- Clear goals of PN-BOT™ use, including a good understanding of data and reports desired from the outset.

With successful long-term PN-BOT™ use, the navigation program will have a strong longitudinal data set of navigated patients and services provided. Such data can provide powerful evidence that can be used for evaluation, research, program coordination, resource allocation or quality improvement purposes.

### **How can patients benefit from the PN-BOT™?**

PN-BOT™ is designed to help navigators stay on top of patient barriers to care and follow up needed. Patients may benefit from potential improvements in navigation services. PN-BOT™ reports provide synthesized evidence to help navigation programs identify potential issues with timeliness to care, common barriers to care and gaps in services, program reach, and navigator effort. This information can be used to guide decisions about care improvements, new services needed, outreach efforts and navigation staffing.